TO: Consensus Standards Approval Committee (CSAC)

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RE: Pulmonary and Critical Care Measures

DA: July 13-14, 2016

The CSAC will review recommendations from the Pulmonary and Critical project at its July 13-14, 2016 in-person meeting.

This memo includes a summary of the project, recommended measures, and themes identified from and responses to the public and member comments.

Voting for Pulmonary and Critical Care measures closes at 6pm on July 7, 2016. Voting results will follow this memo as an addendum when available.

Accompanying this memo are the following documents:

1. **Pulmonary and Critical Care Draft Report.** The draft report has been updated to reflect the changes made following Standing Committee discussion of public and member comments. The complete draft report and supplemental materials are available on the project page.
2. **Comment table.** Staff has identified themes within the comments received. This table lists 24 comments received and the NQF/Standing Committee responses.

CSAC ACTION REQUIRED

CSAC must determine a resolution for measures where consensus was not reached by the Pulmonary and Critical Care Standing Committee. On June 13, 2016, the Committee considered comments received and developer responses in further evaluation of 8 measures for which the Committee did not reach consensus on a recommendation during the March 15-16 in-person meeting. On re-vote the Committee recommended 2 measures, did not recommend 4 measures and again did not reach consensus on 2 measures. The two measures where consensus was not reached by the Committee are:

- 0343 PICU Standardized Mortality Ratio
    - After review of the single comment that noted the measure is not feasible for health plans, the Committee reconsidered the measure. The developer responded that the measure is designed to be reported by PICUs using clinical data which "avoids the well-published shortcomings of administrative data". The developer also noted that the measure is used by more than 100 PICUs nationally – the results could be provided to plans and insurers if requested. The Committee discussed the costs of this fee-based, registry measure but agreed that such measures are allowable under NQF policy and because so many PICUs already participate the measure is feasible. Committee members noted the current low mortality and questioned whether there is opportunity for improvement. Others noted that the variability of results is significant and might be due to the heterogeneity of patients in a PICU. One Committee member noted that the rates are stable despite an increase in the severity of illness of patients in PICUs. On re-

vote the Committee again did not reach consensus on overall suitability for NQF endorsement.

- 1799 Medication Management for People with Asthma
    - The only comment received encouraged harmonization of all asthma measures (#0047, #1800 and#1799) for age limits, data source, diagnosis definitions and risk-adjustment methods. The Committee revisited their earlier discussion on evidence, particularly the Yoon study. The developers reported that NCQA has discussed the study results with Yoon, et al., noting some inaccuracies in how the measure data was analyzed and that further analyses with new data are on-going. The Committee also noted concerns with the long list of allowable medications and pointed out that the measure does not address whether patients are getting the correct medications for their particular type of asthma. On re-vote, the Committee again did not reach consensus on overall suitability for NQF endorsement.

Pursuant to the CDP, the CSAC may consider approval of 19 candidate consensus standards.

Pulmonary and Critical Measures Recommended for Endorsement:

- 0047 Asthma: Pharmacologic Therapy for Persistent Asthma
- 0091 COPD: Spirometry Evaluation
- 0275 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI 05)
- 0283 Asthma in Younger Adults Admission Rate (PQI 15)
- 0334 PICU Severity-adjusted Length of Stay
- 0335 PICU Unplanned Readmission Rate
- 0468 Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following pneumonia hospitalization
- 0513 Thorax CT—Use of Contrast Material
- 0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- 1800 Asthma Medication Ratio
- 1893 Hospital 30-Day, all-cause, risk-standardized mortality rate (RSMR) following chronic obstructive pulmonary disease (COPD) hospitalization
- 2856 Pharmacotherapy Management of COPD Exacerbation

Pulmonary and Critical Measures Recommended for Inactive Endorsement with Reserve Status:

- 0102 COPD: inhaled bronchodilator therapy

Pulmonary and Critical Measures Not Recommended

- 0279 Bacterial Pneumonia Admission Rate (PQI 11)
- 0702 Intensive Care Unit (ICU) Length-of-Stay (LOS)
- 0703 Intensive Care: In-hospital mortality rate
- 2794 Rate of Emergency Department Visit Use for Children Managed for Identifiable Asthma: A PQMP Measure
- 2816 Appropriateness of Emergency Department Visits for Children and Adolescents with Identifiable Asthma: A PQMP Measure
- 2852 Optimal Asthma Control

BACKGROUND

Chronic lower respiratory disease caused 138,000 deaths in 2010 and is the third leading cause of death in adults older than 18. The treatment and management of respiratory disease places an enormous burden on the healthcare system, with an estimated economic cost of $106 billion for asthma, chronic obstructive pulmonary disease (COPD), and pneumonia in 2009 ($81 billion in direct health expenditures and $25 billion in indirect cost of mortality). Critical care is the specialized treatment of patients whose conditions are life-threatening and who require comprehensive care and constant monitoring, usually in intensive care units (ICUs); for critical care, there are approximately 6,000 ICUs in the United States, caring for over 55,000 critically ill patients each day. This NQF project sought to identify and endorse performance measures for accountability and quality improvement that address conditions, treatments, diagnostic studies, interventions, procedures, or outcomes specific to pulmonary conditions and critical care, including: asthma management, COPD mortality, pneumonia management and mortality, and critical care mortality and length of stay.

DRAFT REPORT

The Pulmonary and Critical Draft Report presents the results of the evaluation of 22 measures considered under the CDP. Twelve are recommended for endorsement as voluntary consensus standards suitable for accountability and quality improvement, one measure is recommended for inactive endorsement with Reserve Status and six were not recommended. Consensus was not reached on two measures and one measure was deferred to the Patient Safety Committee during the member and public commenting period based on CSAC feedback.

The developer of the deferred measure (Measure #0708 Proportion of Patients with Pneumonia that have a Potentially Avoidable Complication (during the episode time window)) also submitted six similar measures for review by the Cardiovascular (CV) Standing Committee, which were also not recommended for endorsement. HCI3 met with the Consensus Standards Approval Committee (CSAC) co-chairs to discuss the developer's request for reconsideration for the six CV measures. After speaking with the CSAC co-chairs, HCI3 agreed to change the level of analysis for measures currently specified at the clinician level to the facility level. Additionally, NQF leadership suggested that all six measures considered by the CV Committee, as well as the one measure considered by the Pulmonary Standing Committee, be reviewed by the Patient Safety Standing Committee in the upcoming Patient Safety project. After consulting with the Pulmonary Co-chairs, this measure has been deferred and the Pulmonary Committee will not continue their review of the measure.

The measures were evaluated against the 2013 version of the measure evaluation criteria.

	Maintenance	New	Total
Measures under consideration	18	4	22
Measures recommended for endorsement	11	1	12
Measures recommended for inactive endorsement with reserve status	1	0	1

	Maintenance	New	Total
Measures where consensus is not yet reached	2	0	2
Measures not recommended for endorsement	3	3	6
Measure recommendation deferred	1	0	1
Reasons for not recommending	Importance – 1 Scientific Acceptability – 0 Overall – 2 Competing Measure – 0	Importance – 1 Scientific Acceptability – 0 Overall – 2 Competing Measure – 0	

COMMENTS AND THEIR DISPOSITION

NQF received 24 comments from five organizations (including three member organizations) and individuals pertaining to the general draft report and to the measures under consideration.

A table of comments submitted during the comment period, with the responses to each comment and the actions taken by the Standing Committee and measure developers, is posted to the Pulmonary and Critical Care project page under the Public and Member Comment section.

Comment Themes and Committee Responses

Comments about specific measure specifications and rationale were forwarded to the developers, who were invited to respond.

At its review of all comments, the Standing Committee had the benefit of developer responses. Committee members focused their discussion on measures or topic areas with the most significant and recurring issues.

Theme 1 - Feasibility of Electronic Clinical Data and Paper Medical Records

Many of the submitted Pulmonary and Critical Care measures use electronic clinical data and paper medical records. A commenter expressed that it was not feasible for health plans to implement measures.

Committee Response: The Committee expressed similar concerns during the in-person meeting but agreed these measures are not intended for health plans and fulfill important gap areas. The Committee advised the developers to work towards converting these measures to more accessible data sources.

Theme 2 - Secondary Diagnoses of COPD and Asthma

A commenter stated that secondary diagnoses of COPD and asthma should be captured along with the primary diagnosis for NQF measures #0275 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in

Older Adults Admission Rate (PQI 05) and #0283 Asthma in Younger Adults Admission Rate (PQI 15) since acute conditions can exacerbate COPD or asthma.

Committee Response: The Committee stated this was a valid concern but without further data to understand the effects of adding the secondary diagnosis, agreed with the developer that adding the secondary diagnosis could cause more harm than benefit.

Theme 3 – Patient Refusals

A commenter noted for several measures (#0047: Asthma: Pharmacologic Therapy for Persistent Asthma and #0091 COPD: Spirometry Evaluation) that "patient refusal should not be an exclusion to the denominator" noting that patient education explaining the benefits of treatment is expected. The commenter stated that "asking the patient if he/she wants an inhaled steroid, and getting a refusal should not be terms for removing the patient from the denominator."

Committee Response: The Committee expressed similar concerns during the in-person meeting but agreed with the developer that patient recusals are appropriate exclusions.

REMOVE ENDORSEMENT OF MEASURES

Six measures previously endorsed by NQF have not been re-submitted and withdrawn from maintenance of endorsement:

Measure	Reason for Withdrawal

Measure	Reason for Withdrawal
0036 Use of Appropriate Medications for People With Asthma (ASM) (National Committee for Quality Assurance)	Following a re-evaluation of this measure and recommendation by our Respiratory Measurement Advisory Panel, and review by our Committee on Performance Measurement, Use of Appropriate Medications for People with Asthma has been retired from HEDIS® and therefore is being removed from NQF maintenance endorsement.
0096 Community-Acquired Bacterial Pneumonia (CAP): Empiric Antibiotic (American College of Emergency Physicians)	Measure not submitted by developer. Reason not provided.
0147 Initial antibiotic selection for community-acquired pneumonia (CAP) in immunocompetent patients (Centers for Medicare & Medicaid Services)	Measure not submitted by developer. Reason not provided.
0548 Suboptimal Asthma Control (SAC) and Absence of Controller Therapy (ACT) (Pharmacy Quality Alliance; PQA)	PQA is testing new criteria for this measure, including how the denominator is defined, and revising specific medication lists based on clinical evidence. "Once we determine how these changes influence the reliability of the measure, we will consider submitting the new measure for NQF endorsement."
0666 Ultrasound guidance for Internal Jugular central venous catheter placement (American College of Emergency Physicians)	Measure not submitted by developer. Reason not provided.
0667 Inappropriate Pulmonary CT Imaging for Patients at Low Risk for Pulmonary Embolism (American College of Emergency Physicians)	Measure not submitted by developer. Reason not provided.

Appendix A-Measure Evaluation Summary Tables

LEGEND: Y = Yes; N = No; H = High; M = Moderate; L = Low; I = Insufficient

0047 Asthma: Pharmacologic Therapy for Persistent Asthma
Submission | Specifications
Description: Percentage of patients aged 5 years and older with a diagnosis of persistent asthma who were prescribed long-term control medication Three rates are reported for this measure: 1. Patients prescribed inhaled corticosteroids (ICS) as their long term control medication 2. Patients prescribed other alternative long term control medications (non-ICS) 3. Total patients prescribed long-term control medication Numerator Statement: Patients who were prescribed long-term control medication Denominator Statement: All patients aged 5 years and older with a diagnosis of persistent asthma Exclusions: Denominator Exceptions: Documentation of patient reason(s) for not prescribing inhaled corticosteroids or alternative long-term control medication (eg, patient declined, other patient reason). The American Academy of Asthma Allergy and Immunology (AAAAI) follows PCPI exception methodology and PCPI distinguishes between measure exceptions and measure exclusions. Exclusions arise when patients who are included in the initial patient or eligible population for a measure do not meet the denominator criteria specific to the intervention required by the numerator. Exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. For this measure, exceptions may include patient reason(s) (eg, patient declined). Although this methodology does not require the external reporting of more detailed exception data, the AAAAI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. In further accordance with PCPI exception methodology, the AAAAI advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. Adjustment/Stratification: Level of Analysis: Clinician: Group/Practice, Clinician: Individual Setting of Care: Ambulatory Care :: Clinician Office/Clinic Type of Measure: Process Data Source: Administrative claims, Electronic Clinical Data, Paper Medical Records, Electronic Clinical Data :: Registry Measure Steward: The American Academy of Asthma Allergy and Immunology
• STANDING COMMITTEE MEETING [03/15/2016] • 1. Importance to Measure and Report: **The measure meets the Importance criterion.** • (1a. Evidence, 1b. Performance Gap) • 1a. Evidence: Accepted Prior Evaluation; 1b. Performance Gap: H-4; M-16; L-0; I-0 • Rationale: • The developer provided evidence from clinical practice guidelines for the use of long-term medications for patients with persistent asthma from the National Heart, Lung, and Blood Institute (NHLBI), National Asthma Education and Prevention Program (NAEPP), National Institutes of Health. The evidence was ranked Category A and includes randomized control trials (RCTs) and expert panels. • The Committee agreed with the developer that there is no new evidence for this measure. The Committee

0047 Asthma: Pharmacologic Therapy for Persistent Asthma
accepted the prior evaluation of this criterion without further discussion. • According to the Centers for Medicare & Medicaid Services (CMS) Physician Quality Reporting Initiative/System (PQRI/S) 2008 claims data, 46.29% of patients did not meet the measure, which the developer states is evidence of a gap. Based on its updated testing (CY 2014 data) for 44 clinics, the developer states the inhaled corticoid steroid rate prescribed for long-term control was 88.24 %, and the non-inhaled corticosteroid rate long term control medication rate was 71.77%. The total percentage of patients prescribed long-term control medications for persistent asthma was 99.3%, with some overlap of patients being prescribed BOTH inhaled corticosteroids AND non-inhaled corticosteroids. • The developer cited several published articles and Centers for Disease Control and Prevention (CDC) studies stating disparities exist based on gender, race, age, ethnicity, and income level: African-American adult Medicaid patients with Chronic Obstructive Pulmonary Disease (COPD), asthma, or both have a higher mortality and morbidity than their White counterparts. • Some Committee members expressed concern the measure will be "topped out" in the near future if progress continues. However, they noted there are still opportunities for improvement at this time given the disparities data presented by the developer. • One Committee member also noted, according to PQRS, a significant portion of physicians are not performing at the highest performance rate for this measure.
• 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion. • (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) • 2a. Reliability: H-12; M-8; L-0; I-0; 2b. Validity: H-0; M-17; L-3; I-0 • Rationale: • The developer changed the specifications since the last NQF endorsement review. The age range limitations were removed from the denominator, and the numerator was updated to include generic drug names. • The Committee expressed concern about the long list of medications included in this measure. The Committee recommended the developer include two separate numerators, i.e., controller vs. inhaled corticosteroids (ICS). • The Committee agreed the reliability of the measure was demonstrated, with the developer providing reliability testing at both the measure score (2016) and data element levels (2013). • For the measure score reliability, the developer updated testing by conducting beta-binomial analysis at the measure-score level. The developer reports rates equal to or greater than 0.97 for ICS long-term control, non-inhaled corticosteroid (non-ICS) long-term control, and combined long-term control medications. Data element-level validity testing (1 medical center, 86 patients) was conducted during the last review. • New face validity was assessed by an expert panel of 29 members. The mean rating was 4.79 out of 5.
3. Feasibility: H-17; M-3; L-0; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • The Committee agreed the measure is feasible, since it is specified for claims, registry, and abstraction from paper medical records or electronic health records.
4. Usability and Use: H-15; M-5; L-0; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is publicly reported and used in the PQRS program, payment programs, professional certification/recognition programs, and quality improvement programs.

0047 Asthma: Pharmacologic Therapy for Persistent Asthma
• According to the 2013 PQRS experience report, the average performance score was 89.4% in 2013, which was an increase from 69.1% in 2011. • The Committee did not envision unintended consequences of continued use.
5. Related and Competing Measures • This measure was identified as potentially related to: o 1799: Medication Management for People with Asthma o 1800: Asthma Medication Ratio • The Committee encouraged developers to harmonize all of the asthma measures. Specifically, the developers should harmonize the age limit, data source, diagnoses definitions, and risk adjustment method.
Standing Committee Recommendation for Endorsement: Y-20; N-0
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0091 COPD: Spirometry Evaluation
Submission | Specifications
Description: Percentage of patients aged 18 years and older with a diagnosis of COPD who had spirometry results documented Numerator Statement: Patients with documented spirometry results in the medical record (FEV1 and FEV1/FVC) Denominator Statement: All patients aged 18 years and older with a diagnosis of COPD Exclusions: Documentation of medical reason(s) for not documenting and reviewing spirometry results Documentation of patient reason(s) for not documenting and reviewing spirometry results Documentation of system reason(s) for not documenting and reviewing spirometry results Adjustment/Stratification: Level of Analysis: Clinician: Group/Practice, Clinician: Team Setting of Care: Ambulatory Care: Clinician Office/Clinic Type of Measure: Process Data Source: Administrative claims, Electronic Clinical Data: Registry Measure Steward: American Thoracic Society
STANDING COMMITTEE MEETING [03/15/2016] 1. Importance to Measure and Report: **The measure meets the Importance criterion.** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-10; M-9; L-1; I-0; Rationale: • The Committee agreed with the developer the underlying evidence for the measure has not changed since the last NQF endorsement review, which included recommendations from the 2011 Clinical Practice Guideline Update from the American College of Physicians, American College of Chest Physicians, American Thoracic Society, and European Respiratory Society. The Committee accepted the prior evaluation of this criterion

0091 COPD: Spirometry Evaluation
without further discussion. • The developer reported 45.7% of patients did not meet this measure based on 2008 Physician Quality Reporting System (PQRS) data. The Committee agreed there is a large enough gap in care to warrant a national performance measure.
2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criterion.</u> (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-4; M-15; L-3; I-0; 2b. Validity: H-0; M-18; L-3; I-0 <u>Rationale</u>: • The Committee expressed concern that the time window indicates a 1-year measurement period, but it appears that a spirometry test at any time from age 18 and up counts in the numerator. The developer clarified the goal of the measure is to capture whether the spirometry test was conducted before treatment occurred. The physicians conducting treatment do not necessarily have to perform the test within that year, but need to verify that the test was completed and annually record the results. • The developer stated the performance measure score-level reliability for this measure was 0.73 among groups with 25 or more eligible professionals (EPs) and 0.83 among groups with 100 or more EPs. The developer also conducted empirical testing at the data element level and face validity. The Committee agreed the measure was reliable and valid.
3. Feasibility: H-12; M-9; L-0; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) <u>Rationale</u>: • The Committee agreed all data elements are in defined fields in electronic claims and generated or collected and used by healthcare personnel during the provision of care. No concerns regarding feasibility were noted.
4. Usability and Use: H-8; M-12; L-1; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) <u>Rationale</u>: • This measure has been in use in the Centers for Medicare & Medicaid Services (CMS) Physician Quality Reporting System (PQRIS) program since 2007 and is planned for integration into the CMS Physician Compare program. Although Physician Compare has been launched, this measure has not been included as of December 2015. • The developer acknowledged the possibility of spirometry overuse due to patients moving or switching physicians, however noted research finds underuse of spirometry is a far greater problem than overuse. The Committee agreed the benefits of the measure outweigh any potential unintended consequences. • Overall the Committee felt the bar on this measure was set too low, but it agreed a large gap in care indicates the measure is needed.
5. Related and Competing Measures • This measure was identified as related to: o NQF # 0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD • The Committee felt measure #0091 and #0577 were related and should be harmonized. Since the measures have similar goals, the developers should consider harmonizing the age limit and timeframe.
• **Standing Committee Recommendation for Endorsement**: Y-19; N-2
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

0091 COPD: Spirometry Evaluation
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0275 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI 05)
Submission | Specifications
Description: Admissions with a principal diagnosis of chronic obstructive pulmonary disease (COPD) or asthma per 1,000 population, ages 40 years and older. Excludes obstetric admissions and transfers from other institutions. [NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.] Numerator Statement: Discharges, for patients ages 40 years and older, with either • a principal ICD-9-CM or ICD-10-CM/PCS diagnosis code for COPD (excluding acute bronchitis); or • a principal ICD-9-CM or ICD-10-CM/PCS diagnosis code for asthma [NOTE: By definition, discharges with a principal diagnosis of COPD or asthma are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI software does not explicitly exclude obstetric cases.] Denominator Statement: Population ages 40 years and older in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred. Exclusions: n/a Adjustment/Stratification: Level of Analysis: Population: County or City Setting of Care: Other Type of Measure: Outcome Data Source: Administrative claims Measure Steward: Agency for Healthcare Research and Quality
STANDING COMMITTEE MEETING [03/16/2016] 1. Importance to Measure and Report: **The measure meets the Importance criterion.** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: Y-22; N-0; 1b. Performance Gap: H-6; M-16; L-0; I-0 Rationale: • The developer reported COPD is one of the most common chronic diseases in the United States, and is currently the third leading cause of death. The developer provided updated evidence related to access to care for COPD. • Data provided by the developer demonstrated the average performance rate decreased from 7.10 percent in 2009 to 5.12 percent in 2013. • The Committee agreed the data demonstrated gap. However, it noted contradictory information on the rate of hospitalization based on the race of the patient.
2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion. (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-3; M-19; L-0; I-0; 2b. Validity: H-2; M-18; L-2; I-0

0275 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI 05)

Rationale:

- Reliability testing at the level of the measure score was conducted using data from the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).
- The developer reported a signal-to-noise ratio of 0.97. The measure uses two risk models; when SES is added to the risk adjustment, the signal-to-noise ratio is 0.96.
- One Committee member asked about which risk adjusted model is being used, e.g., age and gender or socioeconomic status. The developer responded that entities usually use age and gender or no risk adjustment.
- Validity was assessed by systematic assessment of face validity by 4 clinical expert panels involving 73 panelists from 2008-2009.
- The developer also conducted empirical validity testing by correlating the measure score to various factors, including health behaviors, access to care, etc.
- Committee members observed that the exclusionary criteria included only pediatric diagnoses. They recommended the developer retool the exclusionary criteria to include adults, e.g., diseases such as bronchiectasis occur across age groups.

3. Feasibility: H-14; M-8; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee acknowledged the measure is feasible. It is based on readily available administrative billing, claims data, and U.S. Census data, and all data elements are in defined fields in electronic claims.
- The AHRQ Quality Indicators (QI) software is publicly available and users have more than 10 years of experience using it.

4. Usability and Use: H-3; M-15; L-4; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- This measure is publicly reported and used in payment programs, quality improvement, regulatory, and accreditation programs.
- The developer reports the Prevention Quality Indicator (PQI) 05 hospital admissions rate decreased by 104,000 fewer hospitalizations from 2011 to 2013.
- The Committee's discussion of unintended consequences included unintended implementation. Specifically, one Committee member noted while the measure is specified at the population level, it is being used at the practice level as a part of the Value-Based Modifier Program. NQF does not place implementation burden on the developer.

5. Related and Competing Measures

- No related or competing measures identified.

Standing Committee Recommendation for Endorsement: Y-18; N-4

6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

0283 Asthma in Younger Adults Admission Rate (PQI 15)

Submission | Specifications

Description: Admissions for a principal diagnosis of asthma per 1,000 population, ages 18 to 39 years. Excludes admissions with an indication of cystic fibrosis or anomalies of the respiratory system, obstetric admissions, and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 18 through 39 years, with a principal ICD-9-CM or ICD-10-CM/PCS diagnosis code for asthma.

[NOTE: By definition, discharges with a principal diagnosis of asthma are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI software does not explicitly exclude obstetric cases.]

Denominator Statement: Population ages 18 through 39 years in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

Exclusions: Not applicable.

Adjustment/Stratification:

Level of Analysis: Population: County or City

Setting of Care: Other

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality

STANDING COMMITTEE MEETING [03/15/2016]

1. Importance to Measure and Report: **The measure meets the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-4; M-17; L-1; I-0

Rationale:

- The Committee agreed the developer provided sufficient evidence to support the rationale. The developer reviewed literature from January 2012 to October 2015 related to aspects of hospitalization for asthma.
- Although, the developer provided some updated evidence related to aspects of hospitalization for asthma, the Committee agreed with the developer that the underlying rationale for this outcome measure has not changed since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion without further discussion.
- Data provided by the developer found the average performance rate decreased from 0.50 percent in 2009 to 0.28 percent in 2013. The Committee agreed the data demonstrated gap, especially as relates to community income level, race, and sex.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-5; M-16; L-1; I-0; 2b. Validity: H-0; M-17; L-5; I-0

Rationale:

- Reliability testing was conducted at the performance measure score level, using signal-to-noise analysis. The developer reported a signal-to-noise ratio of 0.75. When sociodemographic status (SDS) is added to the risk adjustment, the signal-to-noise ratio is 0.74.
- The Committee noted the reliability does not meet the threshold for counties with eligible populations <3,800 and encouraged the developer to prominently note this.

0283 Asthma in Younger Adults Admission Rate (PQI 15)
• Validity was assessed by systematic assessment of face validity by 4 clinical expert panels involving 73 panelists from 2008-2009. The panelist indicated the measure was useful. Specific actions could improve rates, such as access to medications, patient education, and reduction of risk factors, such as environmental exposure to pollution or allergens and smoking. • The developer also conducted empirical testing for validity at the performance measure score level. The developer assessed the relationship of county-level hospital admission rate with county level measures of socioeconomic status (SES) and community environment, heath behaviors and individual risk factors, and access to quality care measures. The developer reported prevalence, health behaviors (HB) and SES/environment were statistically significant predictors (p<.0001). Access to care (AC) was not significant when HB and SES/E are included in the model. • The Committee noted the risk adjustment model was well-calibrated, but the c-statistic is poor, suggesting the developer should consider additional variables.
3. Feasibility: H-19; M-2; L-1; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • The Committee agreed the measure is feasible. The measure is specified for several data sources, including administrative billing and claims. All data elements are in defined fields in electronic claims. The AHRQ Quality Indicators (QI) software is publicly available and users have more than 10 years of experience using it.
4. Usability and Use: H-13; M-9; L-0; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is currently in use in several federal and state public reporting, payment, regulatory, accreditation, and quality improvement with benchmarking programs. • The developer provided data demonstrating improvement in rates of hospitalization between 2011 and 2013; Prevention Quality Indicator (PQI) 11 hospital admissions rate decreased by 9,000 fewer hospitalizations.
5. Related and Competing Measures • This measure was identified as potentially related to: o 0728: Asthma Admission Rate (PDI 14) • The Committee encouraged developers to harmonize all of the asthma measures. Specifically, the developers should harmonize the age limit, data source, diagnoses definitions, and risk adjustment method.
Standing Committee Recommendation for Endorsement: Y-21; N-1
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0334 PICU Severity-adjusted Length of Stay
Submission | Specifications
Description: The number of days between PICU admission and PICU discharge.

0334 PICU Severity-adjusted Length of Stay

Numerator Statement: Number of PICU days, PICU days = Number of days between PICU admission and PICU discharge.(For all eligible patients admitted to the ICU, the time at discharge from ICU minus the time of ICU admission (first recorded vital sign on ICU flow sheet)

Denominator Statement: The denominator is the average (mean) predicted length of stay using the adjustment model.

Exclusions: Patients => 18 years of age

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims, Paper Medical Records, Electronic Clinical Data: Registry

Measure Steward: Virtual PICU Systems, LLC

STANDING COMMITTEE MEETING [03/16/2016]

1. Importance to Measure and Report: **The measure meets the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-6; M-13; L-2; I-0

Rationale:

- The Committee agreed with the developer that the underlying evidence for the measure has not changed since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion.
- The developer recommended, and the Committee concurred, this measure be paired with NQF #0335 during implementation.
- While a performance gap exists, the Committee agreed with the developer's assessment of the performance from 2014, which showed no increasing or decreasing trend.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-9; M-12; L-0; I-0 2b. Validity: H-6; M-13; L-1; I-1

Rationale:

- The developer conducted new validity testing at the data element level. Per NQF guidance, separate reliability testing is not required when validity testing at the data element level is performed for all critical data elements.
- The measure used the PRISM III algorithm, a proprietary risk adjustment scheme. The developer requires initial and quarterly inter-rater reliability from all clinical data collectors for each unit participating in VPS. The developer does not explicitly indicate all critical data elements are assessed during this process. The developer reported an aggregate IRR concordance rate of 96.81% using 2014 data

3. Feasibility: H-3; M-13; L-5; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Some data elements are in defined fields in electronic form and generated or collected by and used by healthcare personnel during the provision of care.
- Committee members expressed concern about the measure being proprietary. Unlike, measure #0335, pulling data for this measure would be much harder without the software.

4. Usability and Use: H-0; M-14; L-6; I-1

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c.

0334 PICU Severity-adjusted Length of Stay

Benefits outweigh evidence of unintended consequences)

Rationale:

- The measure is currently in use in several private sector payer payment and quality improvement programs.
- The Committee expressed concern regarding consistency in implementation. The developer acknowledged the potential for under-coding complications, noting it was reasonable to think this could occur.

5. Related and Competing Measures

- This measure was identified as related by staff to:
    - NQF #0702 Intensive Care Unit (ICU) Length-of-Stay (LOS)
- The Committee was unable to discuss related and competing measures during the in-person meeting and will have the opportunity to do so during the post-comment call.

Initial Standing Committee Recommendation for Endorsement: Y-11; N-10
Re-vote on Standing Committee Recommendation for Endorsement: Y–11; N-4

6. Public and Member Comment

On comment was submitted:

- Highmark does not recommend this measure. Using electronic clinical data and paper medical records makes this measure not feasible for health plans. The value of this measure is questionable without categorizing the data in some way using DRGs or some other categories for types and diagnoses of patients.

Developer response:

The measure was not designed for use by health plans and the measure's validity and reliability stem from the use of clinical data (paper and/ or electronic). These measures are to be collected and reported at the PICU level specific to patients using patient level data. They are currently used by over 100 PICUs nationally and could readily be provided by health care organizations to insurers. In regards to the data categorization comment, there is nothing that precludes such categorization, analysis by patient category can be readily performed at the PICU or aggregate level. Moreover, unlike adult care where there are entire ICUs dedicated to relatively homogenous disease states, pediatrics deals with far smaller volumes of any patient type. PICUs have extremely heterogeneous populations. Due to the complexity of pediatric care, diagnosis level categorization should not be a necessity because although it can be performed as a secondary analysis, it would reflect such small numbers of patients that the findings would be challenging to interpret. Lastly, DRGs have been shown to be poor at best for use in pediatric care (Muldoon Pediatrics. 1999, 103; Munoz J Peds 1989, 115; Munoz AJDC 1989, 143(5)).

The Committee discussed the costs of this fee-based registry measure but agreed that such measures are allowable under NQF policy and because so many PICUs already particpate the measure is feasible. On revote, the Committee recommended the measure for endorsement.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

0335 PICU Unplanned Readmission Rate

Submission | Specifications

Description: The total number of patients requiring unscheduled readmission to the ICU within 24 hours of discharge or transfer.

0335 PICU Unplanned Readmission Rate

Numerator Statement: Total number of unplanned readmissions within 24 hours after discharge/transfer from the PICU.

Denominator Statement: 100 PICU Discharges, <18 yrs of age

Exclusions: Patients =>18 years of age,

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Electronic Clinical Data: Registry

Measure Steward: Virtual PICU Systems, LLC

STANDING COMMITTEE MEETING [03/16/2016]

1. Importance to Measure and Report: **Consensus Not Reached on the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-0; M-13; L-8; I-1

Rationale:

- The Committee agreed with the developer that the underlying evidence for the measure has not changed since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion. The Committee accepted the prior evaluation of this criterion without further discussion.
- The Committee expressed concern about the potential impact of the measure. The developer stated this measure should be paired with NQF #0334 during implementation, thus making it more impactful. The Committee concurred this measure was more helpful when used as a balancing measure to #0334 because it provided information on whether patients were being unjustifiably discharged from the PICU; however, each paired measure must be reviewed separately on its own merits.
- The unit-level unscheduled readmission rate ranges between 0% and 1.67%, and data provided by the developer for 2012-2014 showed no increasing or decreasing trend. The Committee was not able to reach consensus on whether enough of a performance gap exists to warrant a national performance measure.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **Accepted Prior Evaluation;** 2b. Validity: H-3; M-13; L-5; I-0

Rationale:

- The developer noted "numerators, denominators and all definitions are standardized with an inter-rater reliability (IRR) >96%." From this it was inferred that validity testing at the data element level was assessed. Per NQF guidance, separate reliability testing is not required when validity testing at the data element level is performed for all critical data elements. The Committee agreed the underlying reliability for the measure has not changed since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion without further discussion.
- While the Committee ultimately concluded the measure was valid, it expressed the following concerns:
  - Specific decisionmaking elements (leading to successful and unsuccessful PICU discharges) were not teased out. The assumption is that mistakes made regarding deciding who may and may not be successfully discharged from the PICU directly relate to quality of care. While intuitively valid, there are no empirical results to demonstrate this.
  - Intuitively, the score from this measure as specified is an indicator of quality, but there also are variables (e.g., quality of post-PICU care, etc.) that directly affect the numerator and that might not reflect the quality in the PICU or the original discharge decision.

0335 PICU Unplanned Readmission Rate
○ Overall readmission rate is so low that even a low IRR "unreliability rate" could have a statistical impact. ○ A lack of risk adjustment assumes PICUs inherently have the same population and patient characteristics.
3. Feasibility: H-3; M-13; L-5; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • Some data elements are in defined fields in electronic form and generated or collected by and used by healthcare personnel during the provision of care. • Committee members expressed concern about the measure being proprietary. Committee members with PICU expertise stated the software is widely used in PICUs, and the developer reassured the Committee that, while much harder to collect and expect the same level of reliability and validity, the underlying formula for pulling the data is available for use without the software.
4. Usability and Use: H-0; M-14; L-7; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • The measure data are not aggregated and publicly reported; however, some hospitals participating in the VPS system may individually publicly report their data. • The measure is part of programs at the Texas Children and the Hospital California Children Health Services.
5. Related and Competing Measures • No related or competing measures noted.
Initial Standing Committee Recommendation for Endorsement: Y-12; N-9 **Re-vote on Standing Committee Recommendation for Endorsement if paired with #0334** : Y-13; N-2
6. Public and Member Comment One comment was received: • The use of electronic clinical data is not feasible for use by health plans. There are many factors that influence a readmission to the PICU. Pairing this measure with #334 does not seem of any value with no categorizing of data. If this measure is to be paired maybe it should really be combined with some type of diagnostic categories to define the type of patients. • Developer response: The developer notes that the use of 0335 as a balancing measure to 0334 to prevent 'gaming' of the measures. Additionally, the developer states that based on the cited literature and the fact that the measures were explicitly designed to use clinical data to avoid the well-published shortcomings of administrative data, that they feel the feasibility concerns over use by health plans is largely not applicable or valid. After the comment period, the Committee reconsidered this measure and agreed that it is a "balancing measure" for #0334 noting that an increase in readmissions might be an unintended consequence of reducing length of stay. The Committee recommended the measure on the condition that it is paired with measure #0334 and not used as a stand-alone measure.
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0468 Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following pneumonia hospitalization

Submission | Specifications

Description: The measure estimates a hospital-level 30-day risk-standardized mortality rate (RSMR). Mortality is defined as death for any cause within 30 days after the date of admission for the index admission, discharged from the hospital with a principal discharge diagnosis of pneumonia, including aspiration pneumonia or a principal discharge diagnosis of sepsis (not severe sepsis) with a secondary diagnosis of pneumonia (including aspiration pneumonia) coded as present on admission (POA). CMS annually reports the measure for patients who are 65 years or older and are either Medicare fee-for-service (FFS) beneficiaries and hospitalized in non-federal hospitals or patients hospitalized in Veterans Health Administration (VA) facilities.

Please note this measure has been substantially updated since the last submission; as described in S.3., the cohort has been expanded. Throughout this application we refer to this measure as version 9.2.

Numerator Statement: The outcome for this measure is 30-day all-cause mortality. We define mortality as death from any cause within 30 days of the index admission date for patients 18 and older discharged from the hospital with a principal discharge diagnosis of pneumonia, including aspiration pneumonia or a principal discharge diagnosis of sepsis (not severe sepsis) with a secondary discharge diagnosis of pneumonia (including aspiration pneumonia) coded as POA and no secondary discharge diagnosis of severe sepsis.

Denominator Statement: This claims-based measure can be used in either of two patient cohorts: (1) patients aged 65 years or over or (2) patients aged 18 years or older. We have specifically tested the measure in both age groups.

The cohort includes admissions for patients aged 18 years and older discharged from the hospital with principal discharge diagnosis of pneumonia, including aspiration pneumonia or a principal discharge diagnosis of sepsis (not severe sepsis) with a secondary discharge diagnosis of pneumonia (including aspiration pneumonia) coded as POA but no secondary discharge diagnosis of severe sepsis; and with a complete claims history for the 12 months prior to admission. The measure will be publicly reported by CMS for those patients 65 years or older who are Medicare FFS beneficiaries admitted to non-federal hospitals or patients admitted to VA hospitals.

Additional details are provided in S.9 Denominator Details.

Exclusions: The mortality measures exclude index admissions for patients:

1. Discharged alive on the day of admission or the following day who were not transferred to another acute care facility;

2. With inconsistent or unknown vital status or other unreliable demographic (age and gender) data;

3. Enrolled in the Medicare hospice program or used VA hospice services any time in the 12 months prior to the index admission, including the first day of the index admission; or

4. Discharged against medical advice (AMA).

For patients with more than one admission for a given condition in a given year, only one index admission for that condition is randomly selected for inclusion in the cohort.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Centers for Medicare & Medicaid Services (CMS)

STANDING COMMITTEE MEETING [03/16/2016]

1. Importance to Measure and Report: **Consensus Not Reached on the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-1; M-11; L-8; I-1

Rationale:

- The Committee agreed with the developer that the underlying evidence for the measure has not changed

0468 Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following pneumonia hospitalization

since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion without further discussion.

- The Committee noted that mortality rates appeared to be increasing based on the 3 years of data provided and questioned whether the measure was actually having an impact. The developer explained the mortality rates appeared to be increasing due to the expansion of the cohort to include: patients with a principal discharge diagnosis of aspiration pneumonia; principal discharge diagnosis of sepsis (not including severe sepsis); secondary discharge diagnosis of pneumonia (including aspiration pneumonia) coded as present on arrival; and no secondary discharge diagnosis of severe sepsis. The developer stated these patients have a higher mortality risk. The Committee did not reach consensus on whether a sufficient performance gap exists to warrant a national performance measure.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-5; M-13; L-3; I-0 2b. Validity: H-2; M-14; L-4; I-1

Rationale:

- The developer used a split-sample (or "test-retest") methodology to test score-level reliability. For this analysis, the developer randomly assigned half of the patients in each hospital to two separate groups, calculated the performance measure score for each hospital in each of the two groups, and compared the agreement between each hospital's paired scores using the intra-class-correlation coefficient (ICC) and applying a correction factor to account for the overall sample size. The Committee agreed the ICC value from the split-sample analysis of 0.79, indicating that 79% of the variance in scores is due to differences between hospitals, indicated sufficient reliability.
- The Committee expressed concern that only additional testing of the risk-adjustment model using an updated dataset was conducted, and not updated testing of the re-specified measure itself. The developer noted the measure originally was validated by correlating the claims-based performance score results to results from a similar mortality measure that used clinical data obtained via manual chart audit of medical records for the same patient population. The developer further stated it expected the updated measure to have greater validity due to mitigated biases introduced by hospital coding patterns, so felt confirming the effectiveness of the approach to risk adjustment was more relevant. Overall, the Committee agreed with the developer's response.

3. Feasibility: H-8; M-13; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee agreed the measure is feasible. All data elements are in defined fields in electronic claims and generated or collected by and used by healthcare personnel during the provision of care. The data are coded by someone other than person obtaining original information.
- The Committee expressed concern about the measure's ability to assess mortality in patients under 65 years old. The developer agreed there were implementation concerns for individuals under 65, and for that reason, the measure is specified for reporting only for >65 years by Medicare fee-for-service programs.

4. Usability and Use: H-9; M-9; L-3; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- This measure is publicly reported nationally in the Hospital Inpatient Quality Reporting (IQR) Program and used in the Hospital Value-Based Purchasing (HVBP) Program.
- While there were concerns about more widespread use, the Committee agreed the benefits of the measure

0468 Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following pneumonia hospitalization
outweigh any potential unintended consequences.
5. Related and Competing Measures • This measure was identified as potentially related to: o #0231: Pneumonia Mortality Rate (IQI #20) • Committee members noted that two measures of the same thing are confusing to audiences particularly if the results put the hospital at different rankings. A single measure of pneumonia mortality would provide an unambiguous evaluation of performance.
Standing Committee Recommendation for Endorsement: Y-17; N-4
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0513 Thorax CT—Use of Contrast Material
Submission | Specifications
Description: This measure calculates the percentage of thorax computed tomography (CT) studies that are performed with and without contrast out of all thorax CT studies performed (those with contrast, those without contrast and those with both) at each facility. The measure is calculated based on a one-year window of Medicare claims data. The measure has been publicly reported, annually, by the measure steward, the Centers for Medicare & Medicaid Services (CMS), since 2010, as a component of its Hospital Outpatient Quality Reporting (HOQR) Program. Numerator Statement: The number of thorax CT studies with and without contrast ("combined studies"). Denominator Statement: The number of thorax CT studies performed (with contrast, without contrast, or both with and without contrast) on Medicare beneficiaries within a 12-month time window. Exclusions: Indications for measure exclusion include any patients with diagnosis codes associated with: internal injury of chest, abdomen, and pelvis; injury to blood vessels; or crushing injury. Adjustment/Stratification: Level of Analysis: Facility, Population: National, Population: State Setting of Care: Ambulatory Care: Clinician Office/Clinic, Hospital/Acute Care Facility, Imaging Facility Type of Measure: Process Data Source: Administrative claims Measure Steward: Centers for Medicare & Medicaid Services
STANDING COMMITTEE MEETING [03/15/2016] 1. Importance to Measure and Report: **The measure meets the Importance criterion.** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: H-18; M-3; L-0; I-0; 1b. Performance Gap: H-13; M-7; L-0; I-0 Rationale: • The Committee agreed the updated evidence based on 36 American College of Radiology (ACR) appropriate use criteria (AUC) and two clinical practice guidelines from National Collaborating Centre for Cancer (NCCC), a center of the National Institute for Health and Care Excellence (NICE), and AIM Specialty Health (a radiology benefit management company) was strong.

0513 Thorax CT—Use of Contrast Material
• Based on data from 2,413 facilities in 2015, the Committee agreed the performance rates ranging from 0.0% to 46.5%, with a mean of 3.3%, demonstrated an improvement in performance, but also considerable variation. The Committee also noted the developer provided disparities data on the size of the facility, age, gender, and race.
2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion. (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-14; M-7; L-0; I-0; 2b. Validity: H-1; M-20; L-0; I-0 Rationale: • The developer used the beta-binomial approach on an updated sample (2013) of 3,666 facilities. The Committee agreed results of a 30.3% to 100.0% signal-to-noise ratio range indicated the measure is reliable. • The Committee concluded sufficient validity was demonstrated based on the face validity testing performed by the developer through survey of a 10-member Technical Expert Panel (TEP).
3. Feasibility: H-20; M-1; L-0; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • The Committee agreed the measure is feasible. All data elements are in defined fields in electronic claims and generated or collected by and used by healthcare personnel during the provision of care.
4. Usability and Use: H-16; M-5; L-0; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is used in the Hospital Outpatient Quality Reporting Program. • The Committee noted the median rate of overuse decreased significantly from 2010 to 2015 and more widespread use of the measure would be beneficial to the community.
5. Related and Competing Measures • No related or competing measures noted.
Standing Committee Recommendation for Endorsement: Y-21; N-0
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD
Submission | Specifications
Description: The percentage of patients 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis. Numerator Statement: At least one claim/encounter for spirometry during the 730 days (2 years) prior to the Index Episode Start Date through 180 days (6 months) after the Index Episode Start Date. The Index Episode Start Date is the earliest date of service for an eligible visit (outpatient, ED or acute inpatient) during the 6 months prior to the beginning of the measurement year through 6 months after the beginning of the measurement year with any

0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD

diagnosis of COPD.

Denominator Statement: All patients age 42 years or older as of December 31 of the measurement year, who had a new diagnosis of COPD or newly active COPD during the 6 months prior to the beginning of the measurement year through the 6 months before the end of the measurement year.

Exclusions: N/A

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System

Setting of Care: Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING [03/15/2016]

1. Importance to Measure and Report: **The measure meets the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-9; M-12; L-0; I-0

Rationale:

- The Committee agreed with the developer that the underlying evidence for the measure has not changed since the last NQF endorsement review, which included recommendations from 2015 Global Initiative for Chronic Obstructive Lung Disease (GOLD) Guidelines, 2013 Institute for Clinical Systems Improvement (ICSI) Guidelines, and 2011 Clinical Practice Guideline Update from the American College of Physicians, American College of Chest Physicians, American Thoracic Society, and European Respiratory Society. The Committee accepted the prior evaluation of this criterion without further discussion.
- The developer provided data collected from the National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) for Commercial Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs), Medicare HMOs and PPOs, and Medicaid HMO. The mean results ranged from 31% to 44% among the various types of plans, although there was little improvement from 2012 to 2014 (~1%) within each plan type.
- The Committee agreed the data demonstrated variation in utilization of spirometry among the plans.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **Accepted Prior Evaluation**; 2b. Validity: H-8; M-13; L-0; I-0

Rationale:

- While the developer provided testing at the score level using newer data, the Committee agreed the underlying method and results for the measure had not significantly changed since the last NQF endorsement review. The beta-binomial method was used to determine the ratio of signal to noise using health plan data from July 1, 2011 through December 31, 2014 with a median score of 0.88 for Commercial, 0.88 for Medicaid, and 0.95 for Medicare. The Committee accepted the prior evaluation of the reliability criterion without further discussion.
- The Committee expressed concern about the timeframe of 2 years prior to the Index Episode Start Date through 6 months after the Index Episode Start Date as not being evidence-based. However, it concluded it was a reasonable timeframe based on face validity.
- The Committee agreed the additional validity testing conducted at the measure score level since the last NQF endorsement review further strengthened the measure.

3. Feasibility: H-16; M-5; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/

0577 Use of Spirometry Testing in the Assessment and Diagnosis of COPD
unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • The Committee agreed the measure is feasible. All data elements are in defined fields in electronic claims and generated or collected by and used by healthcare personnel during the provision of care.
4. Usability and Use: H-7; M-13; L-1; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is in use in NCQA's State of Health Care annual report and Quality Compass, as well as *Consumer Reports*' website. • Some Committee members expressed concern about the slow increase in improvement by plans, but agreed some improvement can be seen.
5. Related and Competing Measures • This measure was identified as related to: o NQF # 0091 COPD: spirometry evaluation • The Committee felt measure #0091 and #0577 were related and should be harmonized. Specifically, since the measures have similar goals, the developers should harmonize the age limit and timeframe or justify why the differences exist.
Standing Committee Recommendation for Endorsement: Y-21; N-0
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

1800 Asthma Medication Ratio
Submission | Specifications
Description: The percentage of patients 5–64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year. Numerator Statement: The number of patients who had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year. Denominator Statement: All patients 5–64 years of age as of December 31 of the measurement year who have persistent asthma by meeting at least one of the following criteria during both the measurement year and the year prior to the measurement year: • At least one emergency department visit with asthma as the principal diagnosis • At least one acute inpatient claim/encounter with asthma as the principal diagnosis • At least four outpatient visits or observation visits on different dates of service, with any diagnosis of asthma AND at least two asthma medication dispensing events. Visit type need not be the same for the four visits. • At least four asthma medication dispensing events Exclusions: Exclude patients who had any of the following diagnoses any time during the patient's history through the end of the measurement year (e.g., December 31): -COPD

1800 Asthma Medication Ratio
-Emphysema -Obstructive Chronic Bronchitis -Chronic Respiratory Conditions Due To Fumes/Vapors -Cystic Fibrosis -Acute Respiratory Failure Exclude any patients who had no asthma medications (controller or reliever) dispensed during the measurement year. Adjustment/Stratification: Level of Analysis: Health Plan, Integrated Delivery System Setting of Care: Ambulatory Care: Clinician Office/Clinic Type of Measure: Process Data Source: Administrative claims Measure Steward: National Committee for Quality Assurance
STANDING COMMITTEE MEETING [03/15/2016] 1. Importance to Measure and Report: **The measure meets the Importance criterion.** (1a. Evidence, 1b. Performance Gap) 1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-6; M-14; L-0; I-0 Rationale: • Evidence provided by the developer included the 2007 guidelines for the diagnosis and management of asthma from the National Heart and Lung and Blood Institutes (NHLBI). The evidence included a systematic review, graded Category A. The Committee agreed with the developer that although the guidelines were updated, the underlying evidence of the measures had not changed. The Committee accepted the prior evaluation of this criterion without further discussion. • The developer summarized the performance data at a health plan level and stratified by year and product line (Medicaid, Health Maintenance Organization (HMO), and Preferred Provider Organization (PPO)). • Committee members commented the only gap identified occurs among the different types of products, e.g., commercial product versus Medicaid and Medicare. They noted gaps have been consistent throughout 2012, 2013, and 2014. The measure showed slight improvement (approximately 2 percentage points) across Medicaid health plans. • The developer does not currently collect performance data stratified by race, ethnicity, or language. However, the Committee noted it would be helpful to see data stratified by race, ethnicity, urban versus rural, and age.
2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion. (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-15; M-5; L-0; I-0; 2b. Validity: H-8; M-12; L-0; I-0 Rationale: • The specifications had not changed since the last NQF evaluation, and the Committee had no additional comments. • The developer conducted reliability testing at the performance measure score level, using signal to noise analysis. The developer provides the 2015 measure score reliability results, which used data from the 2014 measurement year (386 commercial health plans and 164 Medicaid health plans). The reliability statistics ranged from 0.93-0.97. • The developer used face validity with input from 3 expert panels (2015); the panels concluded that the measure accurately differentiates quality across providers. The developer also conducted construct validity testing (2015) by examining whether the score for this measure was correlated with similar measures of

1800 Asthma Medication Ratio
respiratory care. Construct validity testing indicated the asthma measures were significantly (p<.05) correlated with each other. • The Committee noted the biggest threat to validity is the percentage of people excluded from the measure, particularly the older age cohort. This also was noted as a concern during the Committee evaluation in 2012.
3. Feasibility: H-15; M-5; L-0; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • The Committee agreed the measure is feasible. All data are generated during care processes and are currently included in defined fields in electronic claims.
4. Usability and Use: H-13; M-6; L-1; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is widely used and publicly reported. • The developer noted a slight improvement in the Medicaid health plans and no improvement in the commercial plans. A wide gap between commercial product and Medicaid/ Medicare products was noted. • One Committee member commented, "There's a push in the Medicaid managed care programs to use this measure. As the measure gains traction, I think we'll see better improvement. "
5. Related and Competing Measures • This measure was identified as potentially related to: o 0047: Asthma: Pharmacologic Therapy for Persistent Asthma o 1799: Medication Management for People with Asthma • The Committee encouraged developers to harmonize all of the asthma measures. Specifically, the developers should harmonize the age limit, data source, diagnoses definitions, and risk adjustment method.
Standing Committee Recommendation for Endorsement: Y-20; N-0
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

1893 Hospital 30-Day, all-cause, risk-standardized mortality rate (RSMR) following chronic obstructive pulmonary disease (COPD) hospitalization
Submission | Specifications
Description: The measure estimates a hospital-level 30-day risk-standardized mortality rate (RSMR), defined as death from any cause within 30 days after the index admission date, for patients discharged from the hospital with either a principal discharge diagnosis of COPD or a principal discharge diagnosis of respiratory failure with a secondary discharge diagnosis of acute exacerbation of COPD. CMS annually reports the measure for patients who are aged 65 or older, are enrolled in fee-for-service (FFS) Medicare, and hospitalized in non-federal hospitals. Numerator Statement: The outcome for this measure is 30-day all-cause mortality. We define mortality as death from any cause within 30 days from the date of admission for patients discharged from the hospital with either a

1893 Hospital 30-Day, all-cause, risk-standardized mortality rate (RSMR) following chronic obstructive pulmonary disease (COPD) hospitalization

principal discharge diagnosis of COPD or a principal discharge diagnosis of respiratory failure with a secondary discharge diagnosis of acute exacerbation of COPD.

Denominator Statement: This claims-based measure can be used in either of two patient cohorts: (1) patients aged 65 or older or (2) patients aged 40 years or older.

The cohort includes admissions for patients discharged from the hospital with either a principal discharge diagnosis of COPD (see codes below) OR a principal discharge diagnosis of respiratory failure (see codes below) with a secondary discharge diagnosis of acute exacerbation of COPD (see codes below); and with a complete claims history for the 12 months prior to admission. The measure is currently publicly reported by CMS for those patients aged 65 or older who are Medicare FFS beneficiaries admitted to non-federal hospitals.

Additional details are provided in S.9 Denominator Details.

Exclusions: The mortality measures exclude index admissions for patients:

1. With inconsistent or unknown vital status or other unreliable demographic (age and gender) data;

2. Enrolled in the Medicare hospice program any time in the 12 months prior to the index admission, including the first day of the index admission; or

3. Discharged against medical advice (AMA).

For patients with more than one admission for a given condition in a given year, only one index admission for that condition is randomly selected for inclusion in the cohort.

Adjustment/Stratification:

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING [03/16/2016]

1. Importance to Measure and Report: **The measure meets the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Accepted Prior Evaluation**; 1b. Performance Gap: H-2; M-14; L-4; I-0

Rationale:

- The Committee agreed with the developer that the underlying evidence for the measure has not changed since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion without further discussion.
- The Committee noted there was minor improvement, but agreed there was enough of a gap in care that warranted a national performance measure.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **Accepted Prior Evaluation**; 2b. Validity: **Accepted Prior Evaluation**

Rationale:

- The Committee agreed the underlying reliability and validity testing provided by the developer had not changed since the last NQF endorsement review. The Committee accepted the prior evaluation of this criterion.

3. Feasibility: H-10; M-9; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

1893 Hospital 30-Day, all-cause, risk-standardized mortality rate (RSMR) following chronic obstructive pulmonary disease (COPD) hospitalization
Rationale: • The Committee agreed the measure is feasible. All data elements are in defined fields in electronic claims and generated or collected by and used by healthcare personnel during the provision of care.
4. Usability and Use: H-5; M-12; L-2; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is publicly reported nationally on Hospital Compare. • While there was concern about the small degree of improvement, the Committee agreed the benefits of the measure outweigh any potential unintended consequences.
5. Related and Competing Measures • No related or competing measures noted.
Standing Committee Recommendation for Endorsement: Y-18; N-1
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

2856 Pharmacotherapy Management of COPD Exacerbation
Submission | Specifications
Description: This measure assesses the percentage of COPD exacerbations for patients 40 years of age and older who had an acute inpatient discharge or ED encounter on or between January 1–November 30 of the measurement year and who were dispensed appropriate medications. Two rates are reported. 1. Dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event 2. Dispensed a bronchodilator (or there was evidence of an active prescription) within 30 days of the event Note: The eligible population for this measure is based on acute inpatient discharges and ED visits, not on patients. It is possible for the denominator to include multiple events for the same individual. Numerator Statement: Numerator 1 (Systemic Corticosteroids): The number of patients dispensed a prescription for systemic corticosteroid on or 14 days after the Episode Date*. Count systemic corticosteroids that are active on the relevant date. Numerator 2 (Bronchodilator): The number of patients dispensed a prescription for a bronchodilator on or 30 days after the Episode Date*. Count bronchodilators that are active on the relevant date. *The Episode Date is the date of service for any acute inpatient discharge or ED claim/encounter during the 11-month intake period with a principal diagnosis of COPD. Denominator Statement: All patients age 40 years or older as of January 1 of the measurement year with a COPD exacerbation as indicated by an acute inpatient discharge or ED encounter with a principal diagnosis of COPD. Exclusions: 1) Exclude episode dates when the patient was transferred directly to an acute or nonacute inpatient care setting for any diagnosis. 2) Exclude episode dates when the patient was readmitted to an acute or nonacute inpatient care setting for any

2856 Pharmacotherapy Management of COPD Exacerbation

diagnosis within 14 days after the episode date.

3) Exclude episode dates when the patient had an ED visit for any diagnosis within 14 days after the Episode date.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System

Setting of Care: Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING [03/15/2016]

1. Importance to Measure and Report: **The measure meets the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: H-9; M-12; L-1; I-0; 1b. Performance Gap: H-13; M-7; L-2; I-0

Rationale:

- This measure was previously endorsed as NQF #0549, however the endorsement was removed during the last review in July 2012, and the developer has resubmitted the measure for consideration.
- The developer provided evidence for this measure based on two clinical practice guidelines for the use of systemic corticosteroid and short acting bronchodilator medications to treat patients with Chronic Obstructive Pulmonary Disease (COPD) exacerbations from Global Initiative for Chronic Obstructive Lung Disease (GOLD) and Institute for Clinical Systems Improvement (ICSI). The Committee agreed that the evidence provided by the developer generally supported the measure.
- The developer provided Healthcare Effectiveness Data and Information Set (HEDIS) data based that identified a statistically significant 7 to 16% gap in performance between the 25th and 75th percentile performing plans across the different product lines and indicators.
- The developer does not collect disparities data, but cited published articles and *Healthy People 2020* data stating that disparities exist for COPD, generally, race, age, gender, existing comorbidities, and income level.
- The Committee agreed the data indicate an opportunity for improvement.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criterion.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-5; M-16; L-1; I-0 2b. Validity: H-1; M-13; L-8; I-0

Rationale:

- The developer conducted beta-binomial at the measure score level utilizing data from health plans (241 commercial, 157 Medicaid) that submitted HEDIS data for 2012 and 2015.
- Per the developer, the 10-90th percentile distribution of health plan level-reliability on the rates in this measure show the vast majority of health plans exceeded 0.7, and the majority of plans exceeded 0.8.
- The beta-binomial method also was used for #0549. Reliability statistics for #2856 vs. #0549 were similar for Medicaid plans. For commercial plans, reliability statistics were poorer for #2856 (current submission) as compared that for #0549.
- The Committee agreed that the data provided by the developer supported the reliability of the measure.
- Face validity was assessed by 3 clinical expert panels for a total of 73 panelists. The developer also conducted data element-level validity testing since the prior submission of #0549.
- The Committee had a robust discussion regarding validity:
    - Pearson Correlation Coefficients (PCC) were calculated for 2015 HEDIS data from 241 commercial health plans, 357 Medicare health plans, and 157 Medicaid health plans. The developer reported that the results indicated that the COPD measures were significantly ($p<.05$) correlated with each other in the

2856 Pharmacotherapy Management of COPD Exacerbation
hypothesized direction. o The developer noted endorsement was removed during the last review because it did not pass on validity due to the Committee's concerns about capturing medication samples dispensed in the ED and the developer's definition of active medications. The current Committee expressed concern over the effect of not capturing medications dispensed outside of patients' pharmacy benefit. The developer discussed how health plans are working to get this data from pharmacies via a data exchange. The Committee also voiced concern over the burden involved in such data collection for plans, and the developer explained that there were initiatives underway to close this data gap with health plans. o The Committee also raised concerns about the measure specifications, especially the timeframe specified for the dispensing and administration of medication. The Committee also questioned the exclusion of urgent care facilities from the care settings for this measure. o The Committee expressed concerns regarding the sensitivity and specificity of the data, i.e., whether patients who are labeled as not receiving corticosteroids or bronchodilators actually were prescribed these medications according to their medical record.
3. Feasibility: H-2; M-17; L-3; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale: • The Committee agreed the measure is generally feasible. However, one Committee member expressed concerns regarding potential threats to feasibility, including inability of the ED to access medical records and patients filling patients in various locations not captured by this measure.
4. Usability and Use: H-16; M-6; L-0; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) Rationale: • This measure is a health plan accountability measure that is widely used in national public reporting programs. • The Committee did not identify any issues with the usability and use of the measure.
5. Related and Competing Measures • This measure was identified as potentially related to: o 0102: COPD: inhaled bronchodilator therapy • The Committee felt measure #0102 and #2856 are not related and no further harmonization was needed.
Standing Committee Recommendation for Endorsement: Y-17; N-5
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

0102 COPD: inhaled bronchodilator therapy
Submission | Specifications
Description: Percentage of patients aged 18 years or older, with a diagnosis of COPD (FEV1/FVC < 70%) who have an FEV1 < 60% predicted and have symptoms who were prescribed an inhaled bronchodilator Numerator Statement: Patients who were prescribed an inhaled bronchodilator

0102 COPD: inhaled bronchodilator therapy

Denominator Statement: All patients aged 18 years and older with a diagnosis of COPD, who have FEV1/FVC < 70%, FEV1 <60% predicted and have symptoms (eg, dyspnea, cough/sputum, wheezing)

Exclusions: ATS continues to use the PCPI exception methodology that uses three categories of exception reasons for which a patient may be removed from the denominator of an individual measure: medical, patient and system reasons.

Exceptions are used to remove patients from the denominator of a performance measure when a patient does not receive a therapy or service AND that therapy or service would not be appropriate due to specific reasons; otherwise, the patient would meet the denominator criteria. Exceptions are not absolute, and the application of exceptions is based on clinical judgment, individual patient characteristics, or patient preferences. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure, exceptions include medical reason(s), patient reason(s) or system reason(s) for not prescribing inhaled bronchodilators. Although this methodology does not require the external reporting of more detailed exception data, the ATS recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness.

Adjustment/Stratification:

Level of Analysis: Clinician : Group/Practice, Clinician : Team

Setting of Care: Ambulatory Care : Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data : Registry

Measure Steward: American Thoracic Society

STANDING COMMITTEE MEETING [03/15/2016]

1. Importance to Measure and Report: **The measure meets the Importance criterion.**

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: H-3; M-11; L-6; I-2; 1b. Performance Gap: H-1; M-0; L-20; I-1

Rationale:

- The developer originally brought forward the measure with an updated numerator statement, edited to more closely align to the most recent evidence-based guidelines. The prior numerator was: "Patients who were prescribed an inhaled bronchodilator." It had been updated to: "Patients who were prescribed a long-acting inhaled bronchodilator."
- While the numerator statement had been updated, updated gap analysis, and reliability and validity testing to support the new numerator was not provided by the developer. The Committee noted it was not possible to evaluate the measure without the updated data and voted the measure down on gap. Since gap and testing data for the old measure were provided, the Committee agreed to review the original specifications for endorsement maintenance, if the developer reverted back to the old numerator. The developer agreed and the specifications for the original measure are presented in this report.
- Updated evidence for this process measure is based on clinical practice guidelines for the diagnosis and management of Chronic Obstructive Lung Disease from Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2015 guidelines and American College of Physicians (ACP), American College of Chest Physicians, American Thoracic Society, and European Respiratory Society 2011 guidelines.
- The developer reported this measure was used in the CMS Physician Quality Reporting Initiative/System (PQRS): 2007 through 2013 claims option; 2009 through 2013 registry option; 2011 through 2012 group practice reporting II option; and the 2012 ACO option. In the 2008 data, 53.61% of patients reported on did not meet the measure. The Committee questioned whether there is opportunity for improvement (From 2010-2014, the gap ranged from 73.4% TO 98.5%, and voted to consider the measure for endorsement with

0102 COPD: inhaled bronchodilator therapy
reserve status.
2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criterion.</u> (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-11; M-9; L-1; I-0; 2b. Validity: H-4; M-16; L-2; I-0 <u>Rationale</u>: • The developer presented 2012 performance measure score-level reliability testing with a reliability score of 0.85 among groups with 25 or more EPs participating in the PQRS GPRO program. The Committee agreed the measure demonstrated sufficient reliability so that differences in performance can be identified. • The developer presented 2015 face validity testing, with 88.9% of panelists agreeing or strongly agreeing this measure can accurately distinguish good and poor quality. The Committee agreed sufficient validity was demonstrated.
3. Feasibility: H-18; M-4; L-0; I-0 (3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) <u>Rationale</u>: • The Committee agreed the measure is feasible. All data elements are in defined fields in electronic claims and generated or collected by and used by healthcare personnel during the provision of care.
4. Usability and Use: H-10; M-11; L-1; I-0 (Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences) <u>Rationale</u>: • This measure has been in use for the Centers for Medicare & Medicaid Services (CMS) Physician Quality Reporting System (PQRS) program since 2007 and is planned for integration into the CMS Physician Compare Program. • The Committee did not identify any issues with usability and use.
5. Related and Competing Measures • This measure was identified as related by staff to: o NQF #2856: Pharmacotherapy Management of COPD Exacerbation • The Committee felt measure #0102 and #2856 are not related and no further harmonization was needed.
Standing Committee Recommendation for Potential for Reserve Status: Y-16; N-6
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

Pulmonary and Critical Care 2016

Consensus Standards Approval Committee Review and Recommendations

July 13-14, 2016

Dale Bratzler, Standing Committee Co-chair
David Lang, Standing Committee Co-chair
Poonam Bal, Project Manager, NQF

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Pulmonary and Critical Care

- Evaluated measures in the following areas:
  - Asthma management
  - COPD mortality
  - Pneumonia management and mortality
  - Critical care mortality and length of stay

- For this project, the Committee evaluated 22 measures against NQF's standard evaluation criteria—four new measures and 18 measures undergoing maintenance review.

Pulmonary and Critical Care 2016

- Recommended measures:
  - **Asthma management**
    - Types of measures: 0 intermediate outcome; 2 process; 0 composite; 1 outcome
  - **COPD management**
    - Types of measures: 0 intermediate outcome; 4 process; 0 composite; 0 outcome
  - **Asthma and COPD management**
    - Types of measures: 0 intermediate outcome; 0 process; 0 composite; 1 outcome
  - **Pneumonia management and mortality**
    - Types of measures: 0 intermediate outcome; 0 process; 0 composite; 1 outcome
  - **Critical care mortality and length of stay**
    - Types of measures: 0 intermediate outcome; 0 process; 0 composite; 2 outcome
  - **Imaging**
    - Types of measures: 0 intermediate outcome; 1 process; 0 composite; 0 outcome

Overarching Issue:

- ***Implementation of Measures at Different Level of Analysis than Endorsed***
  - The Committee expressed concern about any measure being used at a different level of analysis than specified by the developer in the submission.
  - Example: AHRQ's population-level measures (#0275, #0279, #0283) are specified at the population level, however, at least one is being used by the federal government at the practice level (Value-Based Modifier Program).
  - NQF's position: Measures should be reviewed as submitted and intended by the developer. It is not within NQF's purview to control the measure's implementation after endorsement review, and the implementation burden also may be out of the developer's control.

Comments Received

Comments Received:

- 24 comments received from 5 NQF member organizations and members of the public.
- Themes include:
  - Feasibility of electronic clinical data and paper medical records
  - Secondary diagnoses of COPD and asthma
  - Patient refusals

Committee Recommendations following Public and Member Comment:

- Standing Committee re-voted on the 8 consensus not reached measures:
  - Two measures were recommended for endorsement
  - Four were not recommended for endorsement
  - Consensus was **still not** reached on two measures:
    - 0343 PICU Standardized Mortality Ratio
    - 1799 Medication Management for People with Asthma

Pulmonary and Critical Care 2016
After Member and Public Commenting

	Maintenance Measures	New Measures	TOTAL Measures
Submitted	18	4	22
Retired by developer	6	0	6
Recommended	11	1	12
Reserve status	1	0	1
Measure Recommendation Deferred	1	0	1
Measures Approved for Trial Use	0	0	0
Measures Where Consensus Not Reached	2	0	2
Not Recommended	3	3	6
Reasons for not recommending:	Importance – 1 Scientific Acceptability – 0 Overall – 2	Importance – 1 Scientific Acceptability – 0 Overall – 2	

Project's Timeline and Next Steps

Executive Committee Review and Ratification	August 3, 2016
Appeals	August 5-September 6, 2016
Final Report	October 2016

Questions?

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